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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/613,385 | 07/03/2003 | Raymond Hobbs | 12207.0900 | 7221 |

7590 06/07/2006

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EXAMINER

MAUST, TIMOTHY LEWIS

| ART UNIT | PAPER NUMBER |
|----------|--------------|
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3751

DATE MAILED: 06/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/613,385 | HOBBS, RAYMOND | |
| | Examiner | Art Unit | |
| | Timothy L. Maust | 3751 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 16-40,44 and 46 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 16-40,44 and 46 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Applicant's election without traverse of Group II, Claims 16 – 40, 44 and 46 in the reply filed on 3/30/06 is acknowledged.

Claim Objections

Claim 46 is objected to because of the following informalities: Claim 46 is dependent upon a cancelled claim. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 16-26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In regard to claim 16, it is unclear how one wall defines an open top area being larger than the area of the floor.

The term "substantially sealed" in claim 44 is a relative term which renders the claim indefinite. The term "substantially sealed" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 16, 17, 21-23, 25-27, 29-32, 35-37, 39, 40, 44 and 46 are rejected under 35 U.S.C. 102(e) as being anticipated by Graham et al.

In regard to claim 16, 20, 22, 23, 25, 27, 35-37, 39, 40 and 44, the Graham et al. reference discloses a “system” 1 for handling hydrogen comprising a “hydrogen source” 2, “hydrogen handling equipment” (pressure vessels 6) partially contained within rack 16, a “dispenser” 3 and “valves”, a “compressor” 7, “piping” 9, “leaning walls” 20 (the walls bow out from the floor that supports the hydrogen equipment and therefore lean away from the equipment) and an “open top” (defined by ventilation grate 28), as claimed. Furthermore, absent further defined structure of substantially sealed, Graham et al. is substantially sealed compared to a system with no covering.

In regard to claims 17, 31 and 32, see abstract.

In regard to claims 21 and 26, see “electrolysis unit” 34 in Figure 4b and column 9, lines 29-39.

In regard to claims 27 and 46, see vertical "vent pipes" 53 in Figure 5b.

In regard to claims 29, 30 and 40 see column 8, lines 43-55.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 18, 19, 24, 33 and 34 rejected under 35 U.S.C. 103(a) as being unpatentable over Graham et al. in view of Heffel et al. (6,612,269)

The Graham et al. reference discloses the invention substantially as claimed (discussed supra), but doesn't disclose dispensing a mixture of hydrogen and natural gas. However, the Heffel et al. reference discloses another dispensing system that dispenses a mixture of hydrogen and natural gas to an engine of a vehicle to increase the energy density produced by hydrogen alone. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the Graham et al. system (if not already) to dispense, as a mixture, both hydrogen and natural gas, in view of the teachings of the Heffel et al. reference in order to increase energy density.

In regard to claim 28, the Graham et al. reference discloses the invention substantially as claimed (discussed supra) including "walls" 20 (see Figure 3a), but does not disclose the walls being cylindrical. It would have been an obvious matter of design

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choice to make the walls cylindrical, since applicant has not disclosed that a cylindrical wall rather than a rectangular wall solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well with a rectangular wall.

In regard to claim 38, it would have been obvious to one having ordinary skill in the art at the time the invention was made to locate the supply pipe at least partially inside the vent pipe, locate all penetrations at the top of the pressure vessel, and locate the bottom of the pressure vessel below grade (see col. 5, lines 26-28), since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japiske*, 86 USPQ 70.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy L. Maust whose telephone number is (571) 272-4891. The examiner can normally be reached on Tue. - Thur. 6:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Justine R. Yu can be reached on (571) 272-4835. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Timothy L Maust
Primary Examiner
Art Unit 3751

Tlm
6/1/06